ISRP 2002 abstract

Presenter/author	Title	Abstract
Howie, Robin *Robin Howie Associates, UK*	**Respirable Fibre Release from Gas Masks**	Up to the 1950s many military and some civilian respirator particulate filters contained asbestos fibres. For example, the UK's General Service Respirator particulate filter contained crocidolite and the particulate filter in civilian gas masks contained chrysotile. It has been reported that asbestos fibres in particulate filters can be released into the wearer's breathing air. Consequently, BS 2091:1969 prohibited asbestos in respirator filters. It is therefore relevant to consider whether asbestos fibres released from respirator or gas mask filters could account for some proportion of the annual 1,500 mesothelioma cases in the UK. A number of pre-1960 respirator filters were tested to determine if respirable fibres were released. Air was drawn through each respirator filter at 100 l/min with a proportion of the air drawn through a sampling filter. After sample collection the sampling filters were cleared and analysed using Phase Contrast Optical Microscopy following standard counting rules. Significant release of respirable fibres was observed from General Service Respirator filters. However, it must be recognised that the filters tested were over 40 years old and may have degraded over this period.